صندوق محمد بن زايد للمحافظة على الطيور الجارحة
MOHAMED BIN ZAYED
RAPTOR CONSERVATION FUND

POWERING PROGRESS

PROTECTING BIODIVERSITY, A WIN-WIN FOR UTILITIES AND BIODIVERSITY

DR MUNIR VIRANI
CEO, MOHAMED BIN ZAYED RAPTOR CONSERVATION FUND

COLLABORATORS & Partners

نادي صقاري الإمارات
EMIRATES FALCONERS' CLUB

الصندوق الدولي للحفاظ على الحبارى
International Fund For Houbara Conservation

Reneco

INTERNATIONAL ASSOCIATION FOR FALCONRY & CONSERVATION OF BIRDS OF PREY
IAF

هيئة البيئة - أبوظبي
Environment Agency - ABU DHABI

MONGOLIAN BIRD
CONSERVATION CENTER

RAPTORS
MOU

GREEN
BALKANS
greenbalkans.org

Marshall
RADIO TELEMETRY

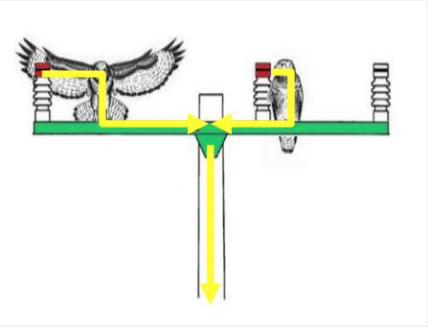
Wildlife Science and Conservation Center of Mongolia

THE
PEREGRINE
FUND

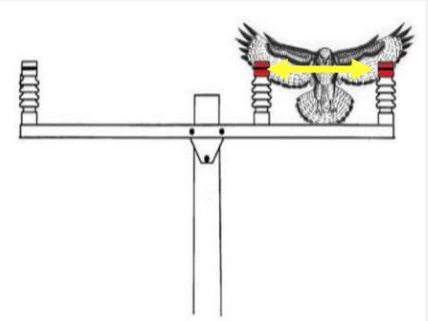
The problem

Mechanism of electrocution

PHASE TO GROUND



PHASE TO PHASE



Purpose of this talk

- Awareness
- Collaborate
- Meeting energy needs
- Identify and implement measures
- Sustainable future

Who we are

Founded in 2018 by HH Sheikh Mohamed bin Zayed Al Nahyan, President of the UAE.

OUR GOAL

To develop transformative and innovative conservation solutions to address key threats facing raptors around the world.

OUR VISION

To to ensure raptors and their habitats are conserved and restored as valuable elements of regional and global biodiversity.

OUR MISSION

To to action and facilitate global programmes that support the conservation and restoration of raptors and their habitats.

WHAT IS A RAPTOR?

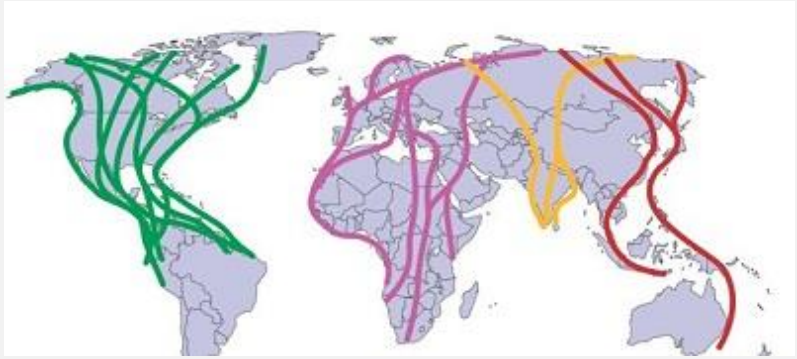
BIRDS AS INDICATORS OF ECOSYSTEM HEALTH

Why raptors?

- Apex Predators
- Indicators of Ecosystem Health
- Critical Ecosystem Services
- Most threatened group of animals worldwide
- Flagships and Icons

Bird migratory flyways

- Routes that birds take when going from one place to another
- Overlap with areas where powerlines are located
- Used as hunting perches
- Powerline distribution impacts birds
- Need to mitigate these impacts



Electrocution in Mongolia

Case study: Addressing electrocution in Mongolia

Dangerous electricity distribution infrastructure

Cheapest construction design:

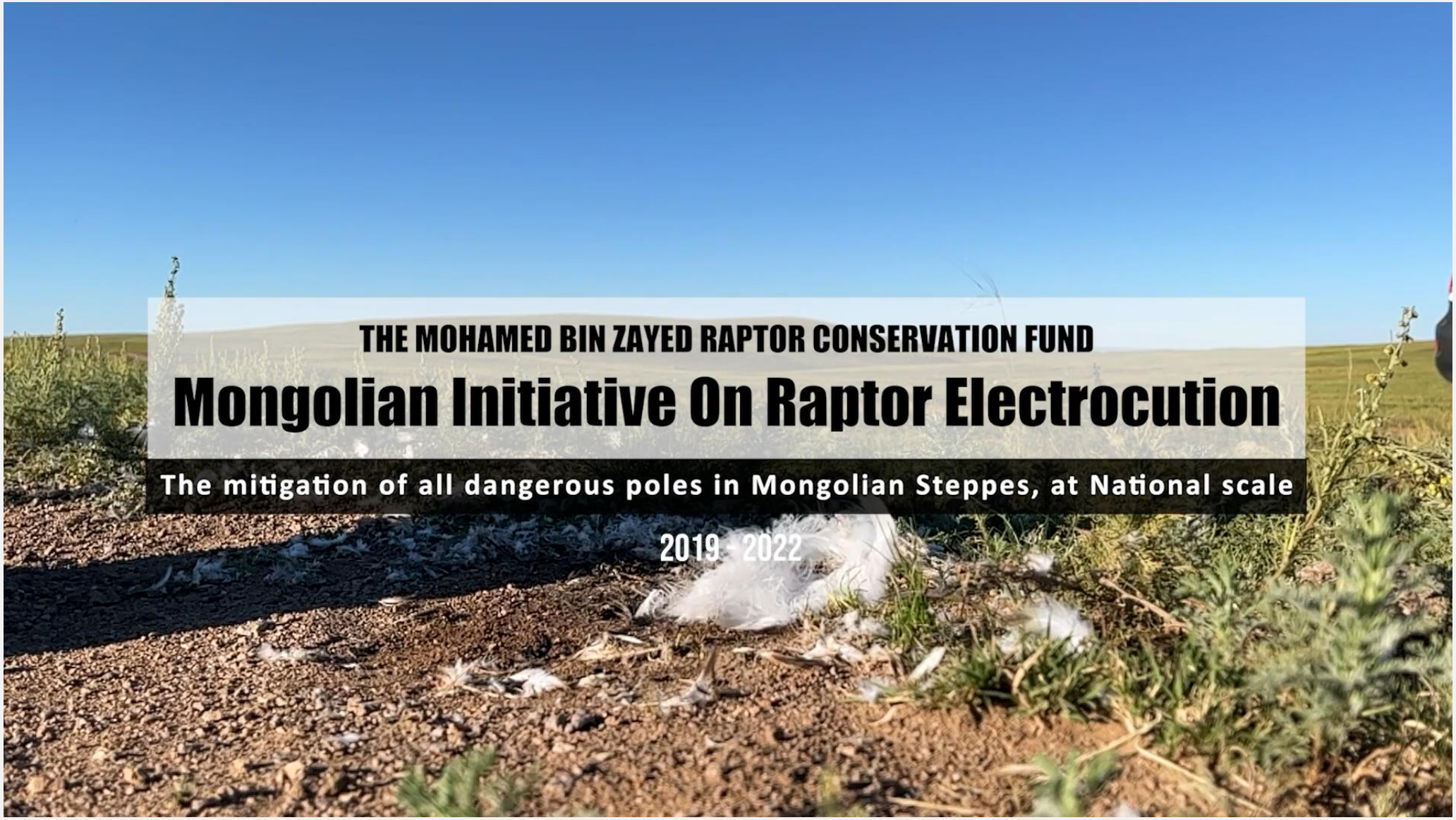
- Replaced pre-1990 infrastructure that was destroyed
- New lines funded by global MLDBs for socio-economic development
- Industrial development, especially mining, requires energy and new distribution infrastructure
- Tourism development, especially tourist camps, requires energy and new distribution infrastructure

More than

30,000

Dangerous poles currently in Mongolia

DANGEROUS LINES CAN ELECTROCUTE HUNDREDS OF RAPTORS EACH MONTH


THE MOHAMED BIN ZAYED RAPTOR CONSERVATION FUND
Mongolian Initiative On Raptor Electrocution
The mitigation of all dangerous poles in Mongolian Steppes, at National scale
2019 - 2022

Key take away messages

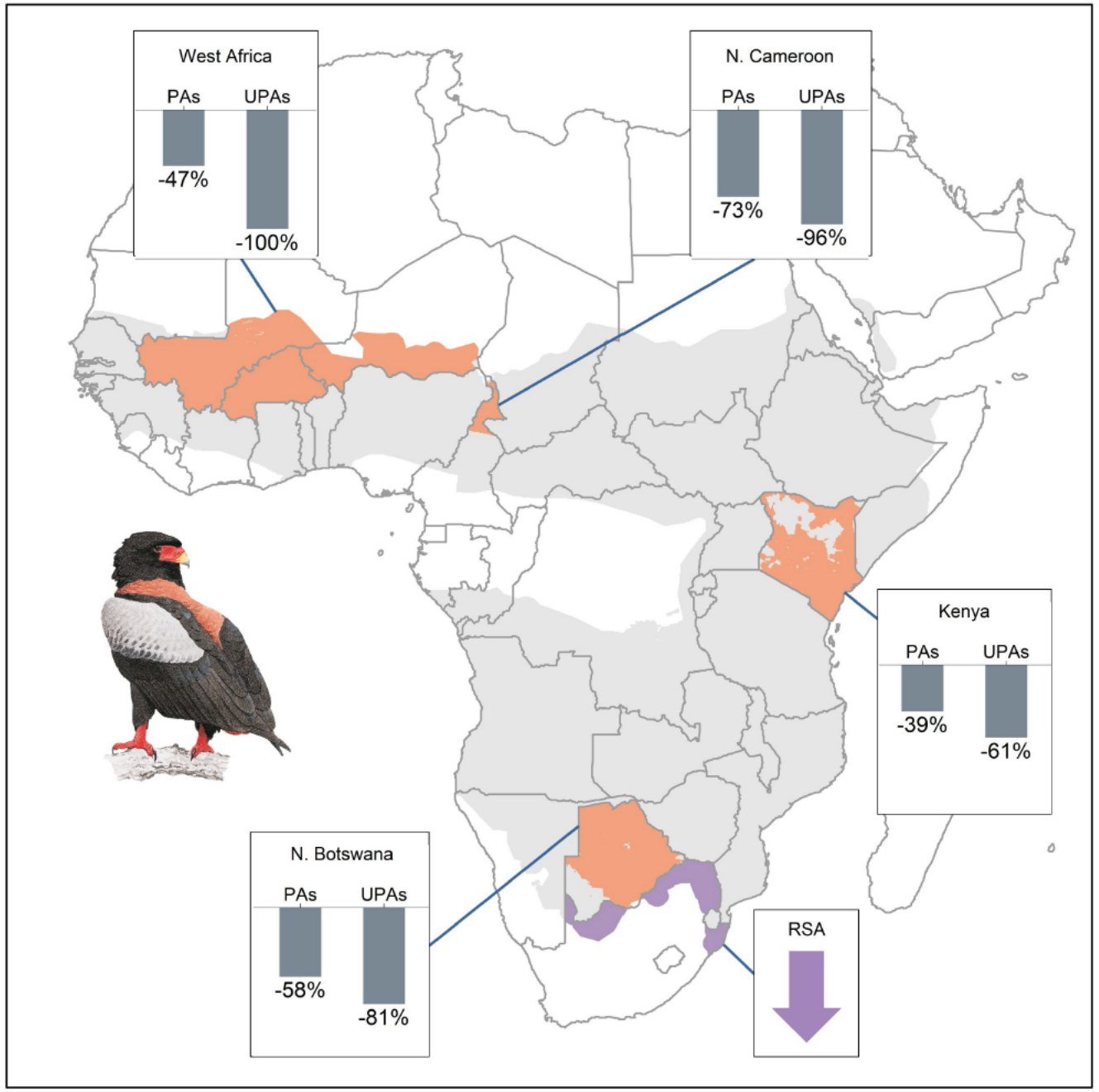
- Electrocution from low voltage distribution lines of thousands of birds annually is a major issue resulting in large scale population declines
- Electrocution causes power outages that results in loss of power, hence revenue, damage to equipment, wasted man-hours and potentially fires that add to carbon emissions
- Unlike other threats, this problem has an EASY FIX

Challenges

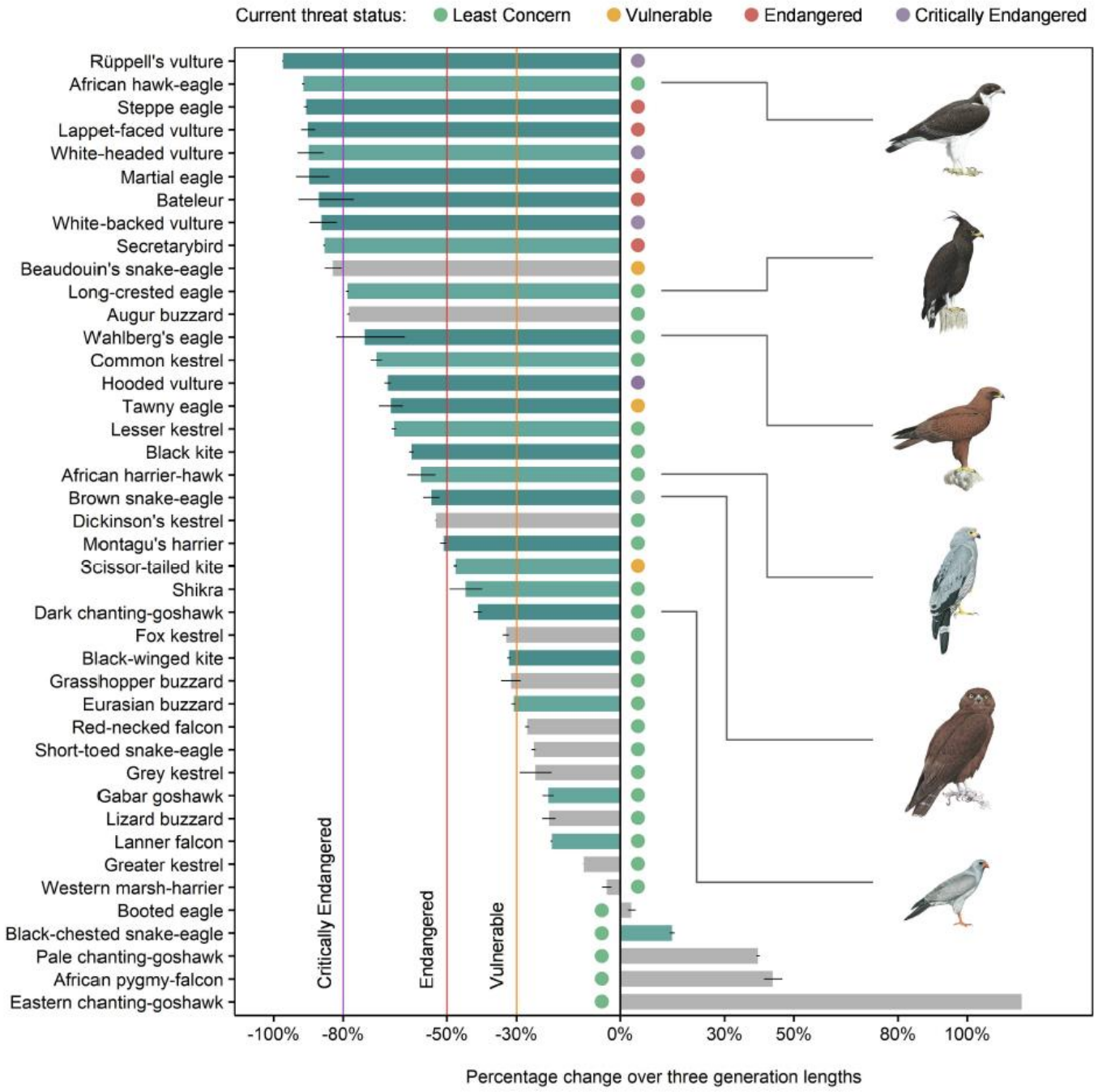
- Varying regulations and standards
- High costs and technical challenges:
- Lack of industry awareness and understanding:
- Limited data and research:
- Political and economic pressures:
- Permits for research!

African savanna raptors show evidence of widespread population collapse and a growing dependence on protected areas (Shaw et al) (*Nature Ecology and Evolution, in review*)

- 42 Savanna Raptor Species Surveyed
- 88% decline between 1969-1995
- 69% exceeding IUCN Criteria classifying species at risk of extinction
- Declines significantly greater in West Africa
- More than twice as severe outside Protected Areas (PAs)
- Large raptors declines steeper and more significant than smaller raptors
- Species suffering steep declines showed more dependence on Pas
- This demonstrates the importance of CBD COP15 of expanding Conservation Areas of land by 20230



Trend estimates were derived from four road transect studies and an atlas project, located in West, Central, 3 East and southern Africa. Road transects were conducted in West Africa, northern Cameroon and Kenya in 1969–1977 and 2000–2020, and in northern Botswana in 1991–1995 and 2015–2016.



Percentage change in the number of individuals encountered 100 km-1 during road transect surveys, projected over three generation lengths.

ORIGINAL RESEARCH article

Front. Ecol. Evol., 11 March 2021
Sec. Conservation and Restoration Ecology
Volume 9 - 2021 |
https://doi.org/10.3389/fevo.2021.590073

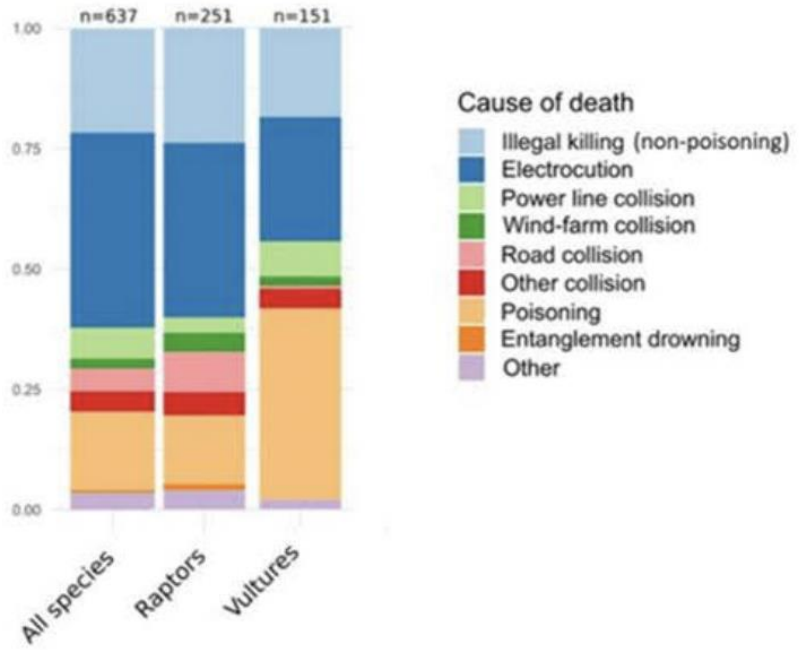
This article is part of the Research Topic
Modern Conservation: Critical Lessons from Birds of Prey
View all 9 Articles >

Declines in an Augur Buzzard *Buteo augur* Population in a Region of Increasing Human Development

Adam J. Eichenwald[1,2*], Arjun Amar[3], Peter Tyrrell[4,5], Evan R. Buechley[6,7] ar
Munir Z. Virani[2,8]

The importance of human-induced mortality for migratory birds at a flyway scale, insights from tracking data. (*multiple authors, in prep)*

12.3 Satellite tracking mortality



Serratosa *et al.* (in prep)
Electrocution accounts for more than one third of mortality events in migratory (non-vulture) raptors, with illegal killing and poisoning also important.

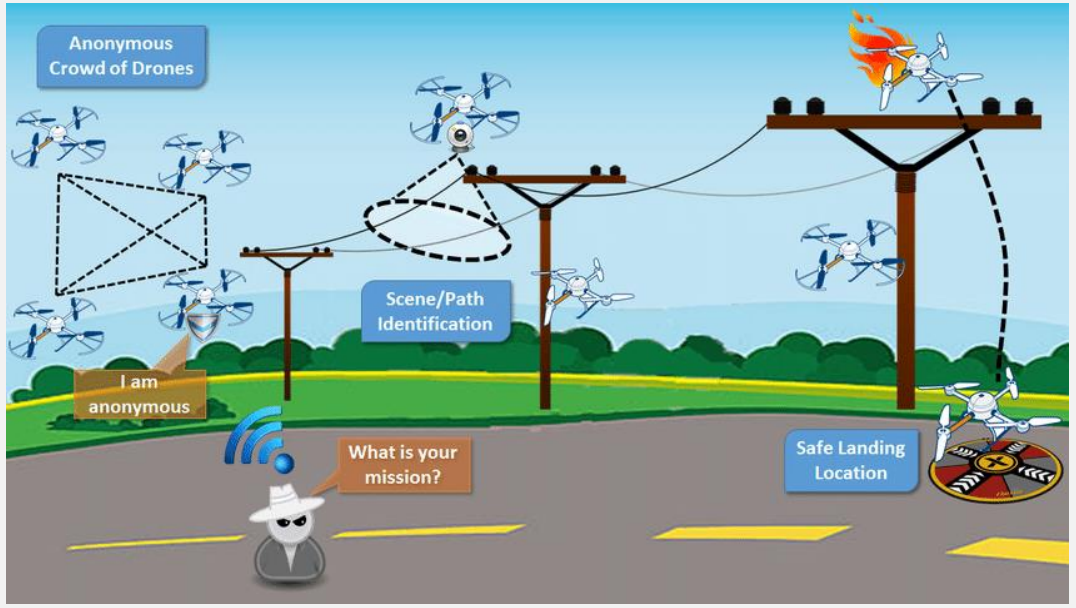
For vultures, poisoning accounted for almost 40% of deaths followed by electrocution and illegal killing (non-poisoning)

Urgent need to address existing unsafe power infrastructure. No dangerous power infrastructure should be erected

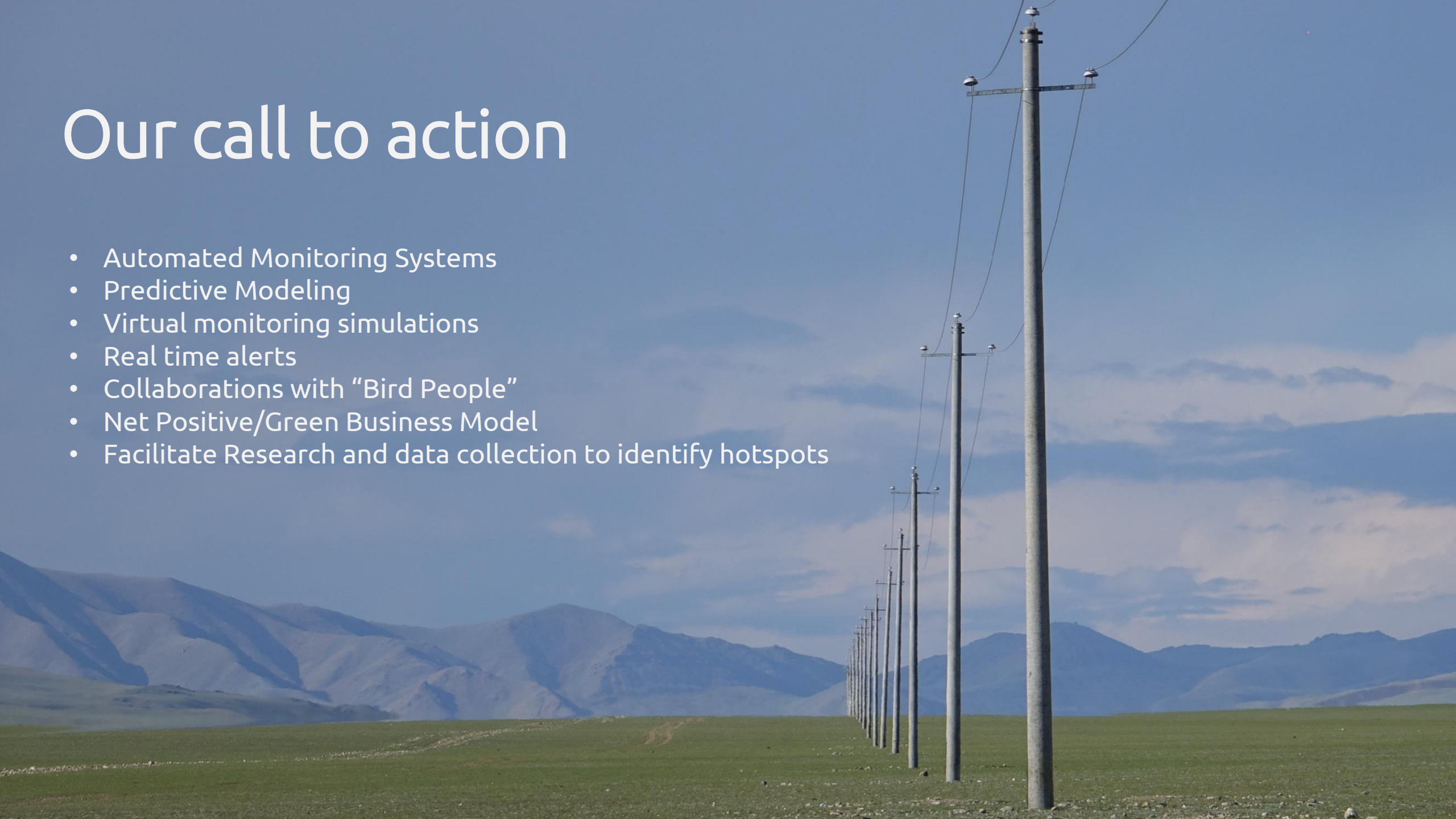
RAPTORS MOU

Opportunities

- Automated Monitoring Systems
- Predictive Modeling
- Virtual monitoring simulations
- Real time alerts
- Collaborations with “Bird People”
- Net Positive/Green Business Model



Our call to action



- Automated Monitoring Systems
- Predictive Modeling
- Virtual monitoring simulations
- Real time alerts
- Collaborations with “Bird People”
- Net Positive/Green Business Model
- Facilitate Research and data collection to identify hotspots

Conclusion

- Easy Fix to the problem of bird electrocutions
- By working together, we can save millions of $$
- Create a future where energy infrastructure is sustainable and reliable…as well as Nature Positive
- Birds thrive and soar for our grandchildren

Thank you

For more information, please contact us at
info@raptorconservationfund.com